

LISTING OF CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Previously Presented) A method for providing full-featured Voice-over Internet Protocol (VoIP) telephony service, comprising the steps of:

receiving in a first network a packet-based VoIP call, wherein the first network is a Hybrid-Fiber Coax network;

translating, within the first network, the VoIP call into a Time-Division Multiplexed (TDM) call compatible with a second network having a capability of processing TDM calls and providing at least one feature for the TDM call, the translating comprises sub-steps of (1) performing required signal processing protocols in the first network to allow the VoIP call to interact with the first network as if the first network was performing switch-based processing functions and (2) mapping IP signaling information developed in the first network into a format suitable for processing by the second network;

routing the TDM call to the second network;

processing the TDM call in the second network; and

routing the TDM call to its intended destination.

2. (Original) The method according to claim 1 wherein the translating step includes translating the VoIP call into a bearer portion and a signaling portion.

3. (Original) The method according to claim 2 wherein the IP signaling information is mapped into a GR-303 format to include performance as well as functional call aspects to allow full-featured processing by the second network.

4. (Previously presented) The method according to claim 3 wherein the IP signaling information includes on-hook and off-hook line status of customer premises equipment (CPE) on which the packet-based VoIP call originated, and the GR-303 format includes ABCD signaling bits, wherein the line status in the IP signaling information is mapped to an equivalent line status in the ABCD signaling bits.

5. (Previously Presented) The method according to claim 4 wherein the IP signaling information includes a power ringing indication, and the GR-303 format includes the ABCD signaling bits, wherein the power ringing indication received via the ABCD signaling bits is mapped to an equivalent power ringing indication in the IP signaling information.

6. (Canceled).

7. (Original) The method according to claim 1 wherein the second network is a public switched telephone network.

8. (Previously presented) The method according to claim 1 wherein the at least one feature includes at least one of: a CLASS feature, a custom calling feature, or a Centrex feature.

9. (Previously Presented) The method according to claim 1 wherein the routing step includes translating the TDM call back to a VoIP call if the destination lies in the first network.

10. (Previously Presented) A method for providing full-featured Voice-over Internet Protocol (VoIP) telephony service, comprising the steps of:

receiving in a first network a packet-based VoIP call and a plurality of non-voice packets, wherein the first network is a Hybrid-Fiber Coax network;

separating the non-voice packets from the VoIP call;

routing the non-voice packets to a data network;

translating, within the first network, the VoIP call into a Time-Division Multiplexed (TDM) call compatible with a second network having a capability of processing TDM calls and providing at least one feature for the TDM call, the translating comprises sub-steps of (1) performing required signal processing protocols in the first network to allow the VoIP call to interact with the first network as if the first network was performing switch-based processing functions and (2) mapping IP signaling information developed

- in the first network into a format suitable for processing by the second network;
routing the TDM call to the second network;
processing the TDM call in the second network;
and
routing the TDM call to its intended destination.
11. (Original) The method according to claim 10 wherein the translating step includes translating the VoIP call into a bearer portion and a signaling portion.
12. (Previously Presented) The method according to claim 10 wherein the IP signaling information includes a power ringing indication, and a GR-303 format that includes ABCD signaling bits, wherein the power ringing indication received via the ABCD signaling bits is mapped to an equivalent power ringing indication in the IP signaling information.
13. (Original) The method according to claim 10 wherein the IP signaling information includes on-hook and off-hook line status of customer premises equipment (CPE) on which the packet-based VoIP call originated, and the GR-303 format includes ABCD signaling bits, wherein the line status in the IP signaling information is mapped to an equivalent line status in the ABCD signaling bits.
14. (Original) The method according to claim 10 wherein the IP signaling information is mapped into a GR-303 format so as to include performance as well as functional call aspects to allow full-featured processing by the second network.
15. (Canceled)
16. (Original) The method according to claim 10 wherein the second network is a public switched telephone network.
17. (Previously Presented) The method according to claim 10 wherein the at least one

feature includes at least one of: a CLASS feature, a custom calling feature, or a Centrex feature.

18. (Previously Presented) The method according to claim 10 wherein the routing step includes translating the TDM call back to a VoIP format if the destination lies in the first network.